

ABSTRACT

The present invention relates to an endoscopic visioning system and related method for both forward and backward viewing of a body lumen. According to an embodiment, the system includes an endoscope, a vision head including a light source and a vision chip on both a proximal and a distal side of the vision head, and an extension arm for moving the vision head away from and back toward the endoscope. Alternatively, the light source and vision chip may be contained in a distal end of the endoscope. In such an alternative embodiment, the vision head is a parabolic mirror mounted on the extension arm for reflecting images, for example, from behind the distal end of the endoscope to the vision chip in the distal end of the endoscope to permit, for example, a retrograde view of the surgical site entrance.